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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,990	08/21/2001	Hermann-Jens Womelsdorf	MO-6508/LEA33.306	8025

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EXAMINER

METZMAIER, DANIEL S

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 07/14/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/913,990

Applicant(s)

WOMELSDORF ET AL.

Examiner

Daniel S. Metzmaier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-6, 11-13 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-6, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claims 3-6, 11-13, and 15-17 are pending. The extension of time and amendment filed April 21, 2003 have been entered as Paper No. 7 and 8, respectively. Claims 1-2, 7-10 and 14 were canceled; claims 3-6 and 11-13 amended; and new claims 15-17 added by said amendment.

Election/Restrictions

1. Newly submitted claims 13 and 15-17¹ are directed to methods of adding "the gel according to claim 3" (claim 3 is directed to a method of making a particulate gel, not a gel per se) and therefore is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: applicants originally presented use claims, which are improper method claims. In response to the first Office Action, wherein art was applied to the composition and method of making claims, applicants have canceled and/or amended all claims to process of making and process of using claims. Said response is considered evidence that a single inventive concept is lacking in the instant invention and said methods of adding as set forth in claims 13 and 15-17 are properly restricted from the remaining method of making claims. Attention is further directed to footnote 1 in the last Official Office Action.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 13 and 15-17 have been withdrawn from

¹ Claims 15-17 are in improper form since said claims refer to a gel according to claim 3 but claim 3 is directed to a process of preparing nano size zinc oxide particles.

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consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

2. The drawings filed on August 21, 2001 are acceptable subject to correction of the informalities indicated on the attached "Notice of Draftsperson's Patent Drawing Review," PTO-948. In order to avoid abandonment of this application, correction is required in reply to this Office action. The correction will **NOT** be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3-6 and 11-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 sets forth in the preamble "Process for the preparing of nanosized zinc oxide particles having an average primary particle diameter of ≤ 15 nm" and the last step of the process is "separating the gel". It is unclear whether the gel is the nanosized particles defined in the preamble or the particles are produced upon re-dispersion of the gel in organic solvents and/or water.

Page 1, lines 3 and 4, of the instant specification state: "The present invention relates to nanoparticulate, redispersible zinc oxide gels, to processes for their preparation". Page 4, lines 19 to 22, state: "The invention therefore relates to zinc oxide gels comprising nanosize zinc oxide particles". The claims do not set forth that the

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claimed particles are the gel, which is separated in step d) of claim 3. To the extent the particles are not gels but a part of said gel and redispersion is required to form said particles (see claim 12), claim 3 is deemed to be incomplete since the gel is not the particles of the preamble.

Attention is further directed to applicants response at page 8, last four lines, filed April 21, 2003, Paper No. 8.

Allowable Subject Matter

5. Claims 3-6 and 11-12 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

6. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose or fairly suggest the combination of process steps claimed, wherein a) basic hydrolysis is carried out with a substoichiometric amount of base to form a precipitate, b) maturing the precipitate until the zinc oxide has completely flocculated, c) thickening the precipitate to give a gel, and d) separating the gel. Attention is directed to applicants arguments at page 7 and 8 wherein the prior art is asserted as not forming the claimed gel state and the substoichiometric amount of base.

Substoichiometric amount of base is characterized at page 6, lines 11-13, of the instant specification.

The terms "completely flocculated" have not been explicitly defined in the specification and is characterized as a "precipitate" (page 5, lines 1-2). Said terms are deemed to take their plain meaning in the art. See MPEP 2111.01. Completely

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flocculated is interpreted as flocculated to the point that no more monodispersed colloidal zinc oxide particles exist.

The term gel is defined as a colloid having the dispersed phase combined with the continuous phase to form a viscous jelly-like product.

An example of thickening is characterized at page 7, lines 25-28, and exemplifies centrifugation.

Response to Arguments

7. Applicant's arguments filed April 21, 2003 have been fully considered but they are not persuasive.

8. Applicants (pages 6 and 7) assert the claim amendments obviate the rejections under 35 USC 112, second paragraph. Said amendments raise the new issue addressed above.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

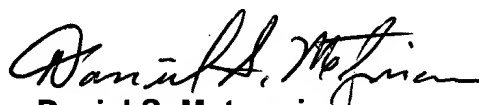
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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (703) 308-0451. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson can be reached on (703) 308-2340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Daniel S. Metzmaier
Primary Examiner
Art Unit 1712

DSM
July 8, 2003